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10/607118  
06/25/03

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. SJO920020150US1

First Inventor Hajji

Title Using Redundant Spares to Reduce Storage ...

Express Mail Label No. EU490778485US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)

2.  Applicant claims small entity status.  
See 37 CFR 1.27.

3.  Specification [Total Pages 28]  
(preferred arrangement set forth below)
 

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4.  Drawing(s) (35 U.S.C. 113) [ Total Sheets 3 ]

5. Oath or Declaration and Power of Attorney [ Total Pages 2 ]

a.  Newly executed (original or copy)

b.  Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)

i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

6.  Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 

- a.  Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
  - i.  CD-ROM or CD-R (2 copies); or
  - ii.  paper
- c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9.  Assignment Papers (cover sheet & document(s))

10.  37 CFR 3.73(b) Statement  Power of (when there is an assignee)  Attorney

11.  English Translation Document (if applicable)

12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations

13.  Preliminary Amendment

14.  Return Receipt Postcard (MPEP 503) (Should be specifically itemized)

15.  Certified Copy of Priority Document(s) (if foreign priority is claimed)

16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.

17.  Other: Express Mail Certificate: .....  
2nd Receipt Postcard: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation     Divisional     Continuation-in-part (CIP)

of prior application No.: \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner: \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

<input checked="" type="checkbox"/> Customer Number or Bar Code Label	31070 (Insert Customer No. or Attach bar code label here)		or	<input type="checkbox"/> Correspondence address below
Name				
Address				
City	State	Zip Code		
Country	Telephone	Fax		

Name (Print/Type)	Timothy N. Ellis	Registration No. (Attorney/Agent)	41,734
Signature	Tim Ellis	Date	June 25, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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# FEE TRANSMITTAL

## for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,270)

## Complete if Known

Application Number

Filing Date

First Named Inventor Hajji

Examiner Name

Art Unit

Attorney Docket No. SJO920020150US1

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None
 Deposit Account:Deposit Account Number  
09-0466

IBM Corporation

The Commissioner is authorized to: (check all that apply)

 Charge fee(s) indicated below  Credit any overpayments
   
 Charge any additional fee(s) during the pendency of this application
   
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	750
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$ 750)</b>

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
28	-20** = 8	x 18	= 144
Independent Claims	7	- 3** = 4	x 84 = 336
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 84	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim, if not paid
1204 84	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
<b>SUBTOTAL (2)</b>		<b>(\$ 480)</b>

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$ 40)**

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Timothy N. Ellis	Registration No. (Attorney/Agent)	41,734	Telephone 858-455-7977
Signature	Tim Ellis	Date	June 25, 2003	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

EXPRESS MAIL CERTIFICATE

"Express Mail" mailing label No. EU490778485US

Date of Deposit: June 25, 2003

Inventor: Hajji et al.

Title of Invention: Using Redundant Spares to Reduce Storage Device Array Rebuild Time

Attorney Docket No.: SJO920020150US1

Attorney: Timothy N. Ellis

I hereby certify that the following documents:

- 1) Patent Application, including 28 pages of specification (including 28 claims), and 3 drawing sheets
- 2) Utility Patent Application Transmittal
- 3) Fee Transmittal
- 4) Declaration and Power of Attorney, 2 pages
- 5) Recordation Form Cover Sheet
- 6) Assignment
- 7) Information Disclosure Statement (3 pages plus copies of listed documents)
- 8) Express Mail Certificate
- 9) 2 Postcard Receipts

Are being deposited in an envelope with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F. R. 1.10 on the date indicated above, and such envelope is addressed to:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Tim Ellis  
\_\_\_\_\_  
Timothy N. Ellis  
Reg. No. 41,734